CEOS IDN NEWSLETTER

Issue 22 April 2007

Edited by Lola Olsen | Designed by Chrissy Chiddo and Monica Holland

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CEOS Plenary Endorses WGISS Endeavors

by Ivan Petiteville, ESA, CEOS WGISS Chair, GEO ADC Co-Chair

(from left to right) Edoardo Marelli (ESA), Stephen Ward (Symbios Ltd), Ivan Petiteville (ESA), Brent Smith (NOAA), and Charles Bigot (ESA)

The last CEOS Plenary (Buenos Aires, Argentina, Nov 14-15, 2006) has been quite encouraging for the CEOS Working Group on Information System and Services (WGISS). The contribution of our working group in support of major initiatives and programmes like the Group on Earth Observations (GEO) has been praised in particular by the GEO Director, Professor José Achache, who attended the Plenary. During the WGISS Report to the Plenary by the WGISS Chair, the excellent work performed by WGISS in 2006 was presented.

In particular, the presentation of the International Directory Network, one of the greatest achievements of CEOS WGISS, has impressed all the participants to the CEOS Plenary as in previous Plenary meetings. A worldwide, interoperable and user-friendly system perfectly matches the GEO spirit. The growing numbers of metadata records (DIF) and users are the best measurements of that successful initiative.

Later in November, the new GEO Working Plan for 2007-2009 was endorsed at the GEO-III Plenary (Bonn, Germany, Nov. 28-29, 2006). The GEO Working Plan is organized in a series of about 70 GEO Tasks, each one managed by a dedicated GEO Task Team. The IDN has been identified and proposed as one of the top contributions from WGISS to GEO for several GEO Tasks.

Several WGISS members are also members of some GEO Tasks. With one of them being Lola Olsen, one can be sure that the IDN will be properly pushed forward and defended.

For what concerns the GEOSS Architecture, the first half of 2007 will be dedicated to the set up of the GEO Core Registries and in particular both the Component Registry and the Service Registry. See the official definitions and descriptions of those two registries at the bottom of this article. It would be a big step forward in the promotion of the IDN to have it registered as soon as the Component Registry and the Service Registry become operational, hopefully around May-June 2007.

As in 2006, CEOS WGISS needs the support of the motivated IDN team in its contribution to Earth Observation and in particular to GEO.

IDN'ly yours,

Ivan Petiteville (ESA, CEOS WGISS Chair and GEO Architecture and Data Committee Co-Chair)

Component: *A part of GEOSS contributed by a GEO Member or Participating organizatiton. Example types of components include observing systems, data processing systems, dissemination systems, educational programmes, or other initiatives. Components may expose service interfaces to provide access to earth observation-related functions and/or data. Components are described in the* ***GEOSS Component Registry****.*

Service: *Functionality provided by a component through component system interfaces. Services communicate primarily using structured messages, based on the Services Oriented Architecture view of complex systems. Services are described, along with information about their operating organizations, in the* ***GEOSS Service Registry.***

CEOS WGISS-22: Annapolis, Maryland

by Kathy Fontaine, NASA

A view of the State House, Annapolis, Maryland

NASA was honored to host WGISS-22 in Annapolis, Maryland, US from September 11 -15, 2006. The meeting was officially opened by Dr. Bryant Cramer, Deputy Director of Earth Sciences in the Science Mission Directorate. Dr. Cramer outlined some of the major issues from the perspective of Earth sciences both within NASA and within CEOS, and encouraged WGISS to continue its productive international partnerships in support of the many current and planned agency, CEOS, and GEO activities. NASA also presented the host workshop, focusing on the missions to measurements concept and highlighting the work of the Earth Science Data Systems Working Groups.

Participants stayed and met at the Historic Inns of Annapolis, and were able to experience some of the history of the area. While 'history' means something different to citizens of other, more established cultures, in the US, Annapolis is one of the oldest sites on the Atlantic coast, founded in 1649, and was briefly the United States Capitol in 1783 and 1784. The meeting venue itself consisted of three houses built between 1727 and 1776, which were later incorporated into the Historic Inns.

The social event for the week was a no-host crab feast at a local restaurant on the South River. For many, this was their first experience with the fine art of crab picking. Prior to dinner, the more experienced residents gave a short course on the use of various utensils (crab mallets, knives, paper towels, finger bowls) and then the group dug in.

Liping Di

Dinner!

Paul Kopp

The meeting was organized by Kate Fitzgerald of Infonetics and Mary Wallace of Stinger Ghaffarian Technologies (SGT). In addition, SGT generously hosted a reception, giving the participants an opportunity to discuss what they heard at the NASA workshop. Through the week, participants commented on the charm and ambience of both the town and the facilities, which seemed to contribute to a very productive meeting.

Geospatial Views of Vietnam

by Tyler Stevens (IDN GIS/Services Coordinator Coordinator)

The "Geospatial Views of Vietnam" mapserver highlights the geographic characteristics of Vietnam. Thematic base layers (cities, hydrology, and administrative boundaries), along with custom symbology and annotation, aid users in easily reading the map and identifying the population of cities. Landsat imagery from NASA characterizes the physical landscape of the region. The mapserver will be demonstrated by Arturo Restrepo during WGISS-23.

This map was created using ESRI's ArcGIS 9.2 software. The map service is available here as an ArcIMS map service, an Open Geospatial Consortium (OGC) Web Map Service (WMS), and a Google Earth KML (Keyhole Markup Language) file. WGISS-23 is being held in downtown Hanoi.

Metadata Development for Biological and Ecological Networks

by Arturo Restrepo (GCMD Ecological Information Coordinator)
and Vivian Hutchison (USGS Biological Resources)

Data sharing, collaboration, and resource leveraging are all part of today's science environment. It is generally recognized that no data set is complete without a metadata record. These standardized records describe important features such as: why the data set was created, who created it, how accurate the data are, what methodologies were used to develop it, and much more. These records transcend people and time, preserve institutional memory, help avoid data duplication, publicize research, and reduce workload.

In this spirit of collaboration and information sharing, the National Biological Information Infrastructure (NBII) and the Global Change Master Directory (GCMD) have been working together to further metadata goals for the past 10 years. NBII partners, USGS Science Centers, and NASA benefit from metadata creation services provided through this unique partnership between NBII and GCMD. The partnership was created specifically so that metadata creation services are made available to augment the number of current and legacy records that are produced and distributed to the NBII Clearinghouse, and the GCMD. Since the initiation of this partnership, thousands of records have been created.

The Collaboration:

Since 1996, the NBII has partnered with GCMD for metadata record creation. This service offers recipients an opportunity to have metadata records created for their organizations using the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geographic Metadata and the Biological Data Profile. Records are created through close interaction between scientists and data managers and the contact at NASA. Before a final record is uploaded into either of the Clearinghouses, it is approved by the originating partner. After a record is complete, it is quality controlled and subsequently included in both the NBII Clearinghouse and the GCMD Directory.

The biodiversity informatics coordinator is integral to the mission of GCMD (to enable the scientific community to discover and access Earth science data and services through integrated information technology systems). The ecological coordinator performs the final check for the information that the public will access and responds to the public's wants and needs. Last year, the informatics coordinator created NBII metadata descriptions, and participated in activities that improved the overall performance of GCMD and NBII Clearinghouse.

Currently, the GCMD allows users to create and validate metadata records on-line through docBUILDER. The latter is a versatile document authoring tool for creating consistent metadata for Earth science and ecological informatics data sets and services. Metadata fields are clearly identified as required, recommended, or optional. Users of the tool can view an XML document as the metadata fields are populated.

Metadata can be saved as an XML file or as a template to automatically populate common fields in subsequent metadata records. The metadata can be validated against the GCMD schema. When completed, the record can be submitted to the GCMD for final validation and population into the directory's database by the Ecological Informatics Coordinator. Records can further be viewed in FGDC format in the metadata display.

The Contacts: Meet Arturo Restrepo

Arturo Restrepo, Ecological Informatics Coordinator, received his Masters in Environmental Science and Technology from UNESCO-IHE in Delft, The Netherlands. His graduate work focused on landscape dynamics and tropical montane cloud forest fragmentation and their relation to socioeconomic history and biophysical attributes in the tropical Andes. This research will soon be published in the International Association of Hydrological Sciences (IAHS) Red Book. Arturo is a native of Colombia, where he received his B. Sc. in Ecology from Universidad Javeriana in Bogota. After graduating, he worked for two years with the Organization of American States (OAS) on the framework and design of the Inter American Biodiversity Information Network (IABIN). Presently, Arturo coordinates the NASA biological/ecological metadata creation and metadata interoperability. His main interest is the application of fuzzy logic in ecosystem management (including food webs and niche overlapping), using approximate reasoning and computational approaches (i.e., Semantic Web and Ontologies). Arturo can be reached at restrepo@gcmd.nasa.gov.

Vivian Hutchison joined the National Biological Information Infrastructure (NBII) in 2002 as the Metadata Program Coordinator. She oversees a national Clearinghouse of metadata records, organizes training workshops for wildlife biologists and data managers, participates in national standards development, and seeks to increase the NBII's metadata partners through outreach and promotional activities. Her position also includes managing content and architecture for several web and portal pages, fielding email questions from the public about the NBII, and participating in activities involving the NBII's Biocomplexity Thesaurus. She is currently serving as the 2007 President for the Organization of Fish and Wildlife Information Managers (OFWIM). Vivian earned her B.A. in Political Science from the Claremont Colleges in 1991. In 2002, she graduated from the University of Maryland at College Park with a Masters of Library and Information Science and completed a Certificate of Natural Resources from Virginia Polytechnic Institute and State University in 2004. Her office is located in the USGS Western Fisheries Science Center in Seattle, WA. Vivian may be contacted at vhutchison@usgs.gov. She will be serving on the GCMD's Science User Working Group.

The Multilingual GCMD/IDN

by Aizawa Kengo, JAXA

JAXA and KEIO University continued to update the multilingual GCMD prototype since developing the "Japanese rendition of GCMD" several years ago. The main purpose of creating the multilingual GCMD was to remove the primary language barrier and make it easier to use the GCMD. We surveyed what is most useful to the users and what is required to maintain accuracy.

As a result of the survey, we found that: (1) Users do not always require a complete translation; however, they may need some assistance. (2) Generally, users feel comfortable if web pages are written in their mother tongue. (3) Narrowing down the translation area will be useful to maintain accuracy. Also, we recognized that adding other languages and sustaining the system easily are important. To satisfy these requirements, we adopted a hybrid method and established it on a proxy server, which functions as an independent server.

We separated the GCMD web pages into "static translation," and "dynamic translation" segments. The static translation applies for controlled keywords: we set the dictionary in the Multilingual GCMD keywords so it could be replaced by the local language.

Therefore, the local keywords are accurate. Dynamic translation applies for the metadata content. To meet a user's request, the "Multilingual GCMD" utilizes a "google translation service" to translate the data set descriptions (DIFs). If there are incorrect or weird translations, users realize they are using the "google service" and can understand the basic concepts. Therefore, it was considered not to be "show-stopper". To add new languages, one simply needs to prepare a new dictionary.

We think the primary purpose has been achieved; therefore, we have discontinued our development. However, the web page will continue to be offered through the courtesy of the KEIO University. We have implemented 3 languages (Japanese, French, and Thai) to the Multilingual GCMD. Please use and evaluate it. We welcome your comments.

URL: http://geoinfo1.sfc.keio.ac.jp/gcmd3/

Atmospheric Science Librarians Hold Their 10th Anniversary Meeting

by Gene R. Major (NASA/GCMD and ASLI Secretary)

The Atmospheric Science Librarians International (ASLI) celebrated their 10th anniversary at the American Meteorological Society's (AMS) Annual Meeting in San Antonio, Texas, January 16-19, 2007. ASLI held their first open meeting at the AMS in Phoenix, Arizona in 1996. The AMS began sponsoring ASLI in 1997, so their meetings could be held in conjunction with the annual AMS conference. ASLI became a non-profit organization in 2001. Cambridge Scientific Abstracts, a premier scientific abstracting and bibliographic service, became ASLI's first corporate sponsor in 2006.

The 10th Annual ASLI meeting featured several presentations, including:

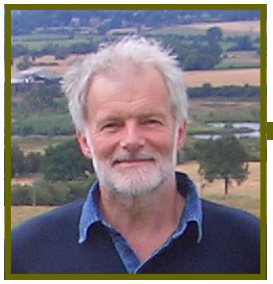
Dr. Steve Ackerman and Dr. John Martin (meteorology professors from the University of Wisconsin), also known as the "Weather Guys" on Wisconsin Public Radio, fielded meteorology questions from the audience and praised the efforts of scientific librarians to assist their students and maintain archives of historical meteorological documents and weather maps.

Dr. W. Paul Menzel from the University of Wisconsin spoke about the early development of geostationary meteorological satellites and their evolution to modern geostationary spacecraft and instrumentation. He showed rare film clips of the first images captured by these historic weather instruments and spacecraft and also a filmed interview with Verner Suomi (http://earthobservatory.nasa.gov/Library/Giants/Suomi/), who pioneered development of the cameras and instruments on the first geostationary satellites.

Dr. James Rodger Fleming from Colby College, author of a new biography: "The Papers of Guy Stewart Callendar: A digital archive on DVD" on the life and works of Callendar was recently published by the AMS. Dr. Fleming received the "ASLI Book Choice Award" for 2007. Callendar is famous for establishing the carbon dioxide theory of climate change. See also: http://www.aip.org/history/climate/co2.htm

Phillip Chadwick from Environment Canada explored "Creative Scene Investigations (CSI)" of paintings by several early 20th century Canadian artists. Chadwick used his meteorological expertise to determine the nature of the weather events captured at the time of the paintings.

ASLI provides a valuable forum for members to share ideas and resources within the atmospheric science disciplines. For more information, visit: http://www.wrclib.noaa.gov/asli/asli.html.



Global Problems Require Global Solutions

by Dr. Wyn Cudlip, QinetiQ

Dr. Cudlip is a Technical Manager at QinetiQ, one of Europe's largest technology research and development companies. He is the British National Space Centre's (BNSC) representative on the CEOS Working Group on Information Systems and Services (WGISS).

Introduction

National governments must co-operate to address issues such as climate change, sustainable developments, and disaster response. CEOS has been addressing international co-ordination in satellite Earth Observation since its formation in 1984. In particular, the CEOS Working Group on Information Systems and Services (WGISS) has been working on issues involving the development of data and information systems required to address the global challenges.

One of the first, and arguably one of the most successful, CEOS/WGISS initiatives was the development of the International Directory Network (IDN) based on NASA's Global Change Master Directory (GCMD) [1]. The IDN has been fostering information exchange among international agencies prior to the development of the World Wide Web [2].

The content and use of the IDN has grown significantly over the years. It now holds information on over 19,000 records, after expanding its scope from holding only data set metadata to also holding related data services. The systems record over five million hits per month. Direct links to data and service URLs are often provided in search results and, more recently, a prototype Web Mapping Service server has been added to allow the visualization of data that have been made available through OGC compliant Web Map Servers.

Recent Developments

With the development of the WWW, the number of internationally supported geo-portals, with the aim of providing access to data, catalogues and directory level information, has proliferated [3]. The IDN is endeavouring to work with and support many of these new initiatives: e.g., the IDN contributes to the FGDC Clearinghouse Geospatial One-Stop and has worked with a number of organisations to create individual geo-portals to support particular themes [4]. The latest, and probably most significant, international development to be supported recently is that being created by the Group on Earth Observation (GEO).

More than 60 countries, together with over 40 international organisations, are now working on the GEO 10-year Implementation Plan for a Global Earth Observation System of Systems, known as GEOSS [5]. This activity includes co-ordinating the development of comprehensive information systems. Two components of this will be the Clearinghouse and the Web Portal.

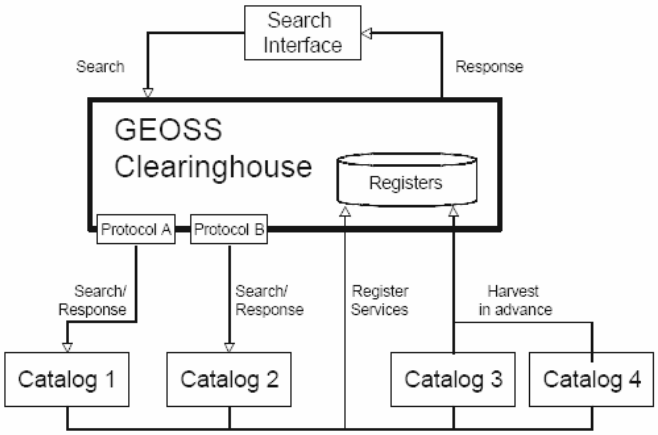


Figure 1. GEOSS Clearinghouse Architecture - Engineering Viewpoint [6].

A Request for Information (RFI) for the Proof of Concept phase for the GEOSS Clearinghouse [6] was issued in October of last year, and the responses are currently being processed. Figure 1 shows the engineering viewpoint of the GEOSS Clearinghouse Architecture.

In addition, an RFI for candidate solutions for providing GEOSS Web Portal Capabilities [7] was issued in January, 2007. This is to be followed by a Proof of Concept Phase and a Call for Participation (CFP) phase; with the aim of completing all three phases by September 2007.

Another significant development of late is the World Meteorological Organization (WMO) Information System (WIS) [8]. Figure 2 shows the WIS components and their relationships. The WMO has been supporting the interchange of information among its members for many years. However, incompatibilities and inefficiencies have developed over time, prompting the Fourteenth World Meteorological Congress in 2003 to approve a plan for developing an integrated WMO Information System that could meet the requirements of all WMO Programmes, affiliated international organisations, programmes and centres, as well as relevant National and non-National Meteorological and Hydrological Services (NMHS), such as disaster prevention and mitigation agencies and research facilities. Furthermore, the WMO Executive Council, in 2005, identified the WIS as a major contribution of WMO to the GEOSS with respect to data exchange and management services.

The WIS offers: (1) Routine collection and automated dissemination of operational-critical data. (2) Timely delivery of high-volume data and processed products, including satellite data and products. (3) Ad-hoc discovery/access/retrieval services for operation-critical data and value-added information. (4) Discovery, access, and retrieval services for all data stored by every WMO programme regardless of location of the archive or the querying user. (5) Common procedures for real and non-real time data exchange and standardized data formats and metadata.

The system builds on WMO's existing Global Telecommunications System (GTS). This is being further improved and will evolve into the core network of the WIS.

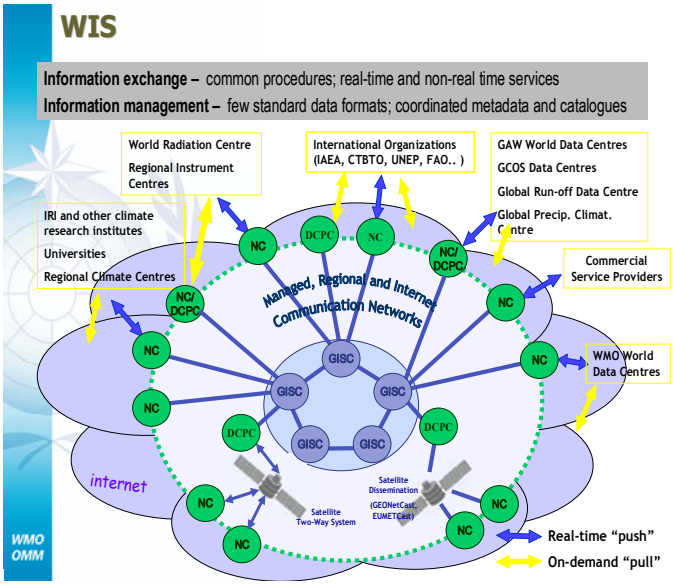


Figure 2. Functional Structure and User Community of WIS [8].

The WIS will also make use of the Integrated Global Data Dissemination Service (IGDDS) comprising two-way satellite systems and co-ordinated by the WMO. The system offers the WIS a cost-effective and reliable data dissemination service for large-volume data sets. It also disseminates operational critical information in countries where GTS links and the Internet have low bandwidths.

IGDDS relies on Advanced Dissemination Methods (ADM), including Digital Video Broadcast by telecommunications satellite (DVB-S) and Direct Broadcast from meteorological satellites. The system includes access to data catalogues and metadata, and allows data discovery and delivery of data on request to authorised users. Within the GEO framework, another data broadcast initiative, led by EUMETSAT, NOAA and WMO, is GEONETCast [9]. This initiative will use the multicast capability of a global network of communications satellites to transmit environmental satellite and in-situ data and products from providers to GEOSS users. GEONETCast builds on the experience gained by EUMETSAT with the EUMETCast operational dissemination system and on the WMO IGDDS concept. It proposes to expand the approach in order to establish a true global dissemination system responding to the needs of all nine GEO societal benefit areas.

Conclusion

The IDN has been playing a leading role in providing access to Earth Science data since before the onset of the WWW. Unlike several other information systems, it has not been "left behind" by new technology. Instead, it has moved from strength to strength, embracing new technology and exploiting it to ensure it maintains its relevancy in tackling today's information discovery and access problems. The challenge now is to explore how best to work with the new international initiatives such as the GEOSS from GEO and the WIS from WMO.

References

[1] Short History of the GCMD. http://gcmd.nasa.gov/Aboutus/

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[3] Global SDI Initiatives. http://www.gsdi.org/SDILinks.asp

[4] IDN Portals. http://idn.ceos.org/

[5] GEOSS. http://www.earthobservations.org/

[6] GEOSS Clearinghouse Request for Information for Proof of Concept Phase. http://www.earthobservations.org/docs/RFI_GEOSS_Clearinghouse_13.10.2006.pdf

[7] Request for Information for GEOSS Web Portal Solutions. http://www.earthobservations.org/docs/RFI_GEOSS_WebPortal_24.01.2007.pdf

[8] WMO Information System (WIS). Dieter C Schiesel. Presentation to 3rd HALO Workshop, December, 2006. http://www.ecmwf.int/research/EU_projects/HALO/workshops.html

[9] GEONETCast. http://www.earthobservations.org/progress/GEONETCast.html

The Next Users' Working Group Meeting

Dr. Wyn Cudlip has kindly agreed to represent the CEOS Working Group on Information Systems and Services (WGISS) on NASA's Global Change Master Directory's Science Users' Working Group (UWG). The next meeting of the working group will be held on June 19th and 20th in Greenbelt, MD.

We wish to thank Ms. Andrea Buffam, Canadian Centre for Remote Sensing, who served on the UWG from 1994 through 2004 as a representative for CEOS and contributed so ably to the International Directory Network effort.

Dr. Cudlip will join Chairperson, Mr. Martin Ruzek (USRA); Dr. Thomas Wagner, National Science Foundation/Office of Polar Programs; Dr. Benno Blumenthal, Lamont-Doherty Earth Observatory at Columbia University; Dr. Eugene Burger, NOAA Pacific Marine Environmental Laboratory; Dr. Hubert Staudigel, Scripps Institution of Oceanography; and Ms. Vivian Hutchison, USGS/Biological Resources Division (BRD) (with John Mosesso as alternate, also from USGS/BRD) for the 2007 meeting. The GCMD Science User Working Group works under the GCMD UWG Terms of Reference.

The Release of MD 9.7: Planned for April 30, 2007

The Global Change Master Directory's (GCMD) Version 9.7 software, will offer:

* **New GCMD Homepage and web site functionality.**
* **New DIF & SERF metadata display.**
  - 'Get-Data' tab for direct access to data.
  - 'Get-Service' tab for direct access to data services.
  - 'Text only' display for 508 compliance.
  - 'View FGDC format' display improved.
  - Multimedia sample display improved.
  - Spatial coverage display using Google Map.
* **Science keyword taxonomy extended to five levels.**
  - The addition of the Data Set Topic, "Biological Classification", inspired this extension of the hierarchy. Data set descriptions have been tagged to be properly represented in this classification.
  - The public view of the new taxonomies for several Topics will be delayed, pending the re-characterization of the keywords associated with data set descriptions within those topics [These changes will be incorporated before the release of MD9.8].
* **Expanded keyword hierarchies for geographic location and chronostratigraphic units (geologic time).**
* **New Platform & Instrument hierarchical keyword options in docBUILDER.**
  - Orbit Types
  - Spectral/Frequency Domain
* **New features within docBUILDER authoring tool.**
  - Additional "Help" option added to assist in usage of international characters and symbols.
  - Expanded docBUILDER tools to create enhanced instrument and platform descriptions (now known as **A**ncillary **D**escription-Instrument (AD-I) and **A**ncillary **D**escription-Platform (AD-P).
  - Improved Writer's Guide for DIFs, SERFs, instruments, and platforms.
  - Improved display of data set and services descriptions.
* **XML namespaces provided within the records.**
* **Java 1.5 and Tomcat 5.0 upgrades incorporated in new release. Keyword Interface now driven by an RDF SKOS data model backed by Berkeley XML database.**
* **Subscription services revised for new/updated data set descriptions. New Daily RSS Feed offered for new data set and data service descriptions.**

Martha Maiden Assumes Role As Vice-Chair of WGISS

Ms. Martha Maiden, NASA Headquarters, was recently appointed as Vice-Chair of WGISS. She has been working in the Earth remote sensing science data area since 1986. Ms. Maiden is the Program Executive for Earth Science Data Systems of NASA Headquarters' Science Mission Directorate. She is responsible for leading strategic planning and setting the direction for NASA's Earth system science data and information systems and services' development and operations. Her program balances NASA's core responsibilities for data services through EOSDIS, ECHO, and the GCMD with community involvement through the IDN and openly solicited, peer-review programs in information technology (called "ACCESS") and data record creation, additions, and improvements (called "MEaSUREs"). Ms. Maiden was a member of CEOS WGISS and its predecessor Working Group on Data during the 1990s.

IDN Task Team Meeting Agenda for Hanoi

by Lola Olsen (NASA) and Arturo Restrepo (NASA/GCMD)

Mr. Arturo Restrepo, the new Biological/Ecological Science Coordinator, will be representing the IDN in Hanoi at the Working Group on Information Systems and Services, WGISS-23, from May 21 - 25, 2007. See http://wgiss.ceos.org. Please contact Arturo at restrepo@gcmd.gsfc.nasa.gov if you plan to give a node report or if you would like a spot on the agenda during the IDN session.

Tuesday Morning, May 22nd
Tentative Schedule for IDN Session: 1 hour and 45 minutes

11:00-11:15	Introduction, Review of Minutes, and Action Items from Annapolis
11:16-11:25	IDN Newsletter and plans for Germany, WGISS-24
11:26-11:30	Usage Statistics
11:31-11:45	Introduction of the new features in MD 9.7, with demo
11:46-12:00	Node Reports, Feedback, and Portals: Bernd Ritschel, GFZ Potsdam; others
12:01-12:10	Re-emergence of the Interoperability Forum: The Onslaught of "Standards"
12:11-12:20	Demonstration of Vietnam - focused mapserver.
12:21-12:35	The Future: MD9.8 and MD10; Feedback
12:36-12:40	Innovations of Interoperability Through the IDN with Examples
12:41-12:45	Wyn Cudlip: Announcement of Upcoming Science Users' Working Group (UWG) Meeting scheduled for June 19&20, 2007.

Message from Paul Kopp, Technology and Services Subgroup Chair

Paul Kopp CNES, stands behind JAXA representatives during the Technology & Services Subgroup Session in Annapolis. From left to right are Shinobu Kawahito, Ben Burford, Satoko Miura, and Aizawa Kengo. Shinobu Kawahito capably served as Data Services Task Team for two years. She has now stepped down from this role. Therefore, Paul will coordinate the preparation for the DSTT for WGISS-23.

The IDN Task Team members will also participate in the Data Services Task Team (DSTT) session to be held on the afternoon of Wednesday, May 23rd, 2007. With the departure of Shinobu Kawahito of JAXA, the DSTT needs a leader to coordinate the DSTT members' activities. Any candidate from WGISS agencies is welcome. The DSTT is one of the most important task teams in WGISS because data services are the way by which data are turned into information, which is what the final data user actually wants.

The scope of the DSTT is vast. We do not yet know the extent of the service taxonomies that have been developed, beyond those offered through the IDN and the ISO19119 standard for geographic services: i.e., a structured list of service categories, which all WGISS agencies could agree on as a common basis. On the other hand, for most agencies, services are still a matter of R&D, which makes them so fascinating. The only thing that is clear today is that services will be one of the keys for interoperability. This is why the task team closely observes and interacts with OGC and ISO standardization activities.

I also wish to take this opportunity to encourage participants to comment on the draft version of the CEOS Interoperabililty Handbook. The objective of the CEOS Interoperability Handbook is twofold: first, it is planned to track all CEOS/WGISS achievements in the field of interoperability. In this sense, it might be viewed as a CEOS/WGISS collective memory. Secondly, it will be offered by CEOS as a set of recommendations applicable to the development of interoperable systems. The Handbook is currently in a preliminary state of development. Readers are encouraged to review it and send comments. To receive a copy, simply send an e-mail to Paul (Paul.kopp@cnes.fr).

WG1SS-23 Web site is open until April 20th

by Satoko H. Miura (JAXA)

Are you ready for the WGISS-23 meeting in Hanoi? If not, it's time to prepare for your trip to Hanoi, Vietnam. Please visit the WGISS-23 site (http://www.wgiss23.com/) to complete your registration and hotel reservation. The cut-off date for the conference registration and hotel reservation is ***April 20th***. Also, please do not forget your VISA application, if needed.

The average temperature in May is around 29.2 degrees C (84.6 degrees F), but can reach up to 39 degrees C (102.2 degrees F). Please be sure to carry appropriate clothing (including sunglasses and umbrella) with you.

Cha Ca (grilled minced fish)

The meeting venue, Melia Hanoi Hotel, is located right in the center of the city of Hanoi and is near main tourist attractions, entertainment, and shopping areas. Of course, you can enjoy excellent "Vietnamese" food close to the hotel very easily.

The representatives from JAXA and Vietnam Remote Sensing Center (VNRSC) are looking forward to seeing you in Hanoi.

The One-Pillar Pagoda was first constructed in 1049 in the middle of a large pond. It was destroyed many times, most recently in 1954 during the French Colonial Retreat and was reconstructed a year later raised on a single concrete pillar.

A busy street of Hanoi is shown here. Transportation primarily consists of tourist and mini buses, taxis, bicycles, motorbike taxis, and cyclos (a 3-wheeled bicycle rickshaw where passengers sit in front and the driver peddles behind).

Preparing for Your Trip to Hanoi

by Christy Chiddo (GCMD Intern)

Hanoi, one of the most charming cities in Southeast Asia, has been the capital of Vietnam for almost one thousand years and is celebrated as the cultural center of Vietnam. Hanoi is a city of shaded boulevards and open parks with a French colonial feel. It lies on the bank of the Red River Delta. In 1831 King Minh Mang named the city. Ha means “river” and Noi means “within”; therefore Ha Noi indicates the city is within the river.

Hanoi’s population is growing and represents the major metropolitan area of Northern Vietnam and the country’s political centre. The Temple of Literature; One Pillar Pagoda; Flag Tower of Hanoi; The Old Quarter; and Hoan Kiem are among the most frequently visited sites. There are also many museums, including the Vietnamese National History Museum, the National Museum of Ethnology, the National Museum of Fine Arts and the Revolution Museum. West Lake is a popular place for people to enjoy. It is the largest lake in the city, and there are several temples to visit in the area. There are small boats for hire, and a floating restaurant, which has been operating for a couple of decades.

The climate here is typical for northern Vietnam, where summers are hot and humid, and winters are relatively cool and dry. The summer months from May to September receive the majority of rainfall in the year.

The people of the city are known to be considerate and polite, with modesty and consideration of others a high priority in their culture. Hanoi is responsible for much of the country's talents in arts and education.

The city’s appearance has changed significantly, especially in recent years. Infrastructure is constantly being upgraded, with new roads and an improved public transportation system. Though some artifacts have not survived through wars and time, Hanoi is a city with intriguing cultural and historical monuments for both visitors and residents.